

A Blueprint for Learning Mathematics Kindergarten

The *Blueprint for Learning* is a companion document for the Tennessee Curriculum Standards which are located at www.tennessee.gov/education. Although the curriculum adopted by the State Board of Education in its entirety remains on the web for additional reference, this reformatted version makes the curriculum more accessible to classroom teachers.

Key features of the reformatted version are:

- All grades for each content area are provided in the printed manual.
- The skills within each grade are identified as to whether they are introduced, developed, or have been mastered and are now being maintained at that level.
- The skills correlating with the state criterion referenced test (CRT) are also identified for classroom instruction.
- In the Language Arts section, the assessed skills (performance indicators) are identified not only for the state's CRT in grades 3-8 but also for the writing assessment in grades 5 and 8.
- This guide makes the planning of instruction for students with varying abilities easier to accomplish.
- Teachers can plan and work together to improve school wide student achievement through curriculum integration across content areas and grade levels.
- Teachers can identify current grade level skills as well as those needed to prepare students for the next year.

Skills are coded and identified as Introduced (I), Developing (D), State CRT and Writing Assessed (A), and Mastered and Maintained (M).

- Introduced (I) skills are new skills presented at that grade level. Even though a skill is considered introduced at a grade level, some development would also occur.
- Developing (D) skills are skills that have been introduced at a previous grade level. At this stage of development the skills are being refined and expanded.
- Assessed (A) skills are those skills that are correlated to the state performance indicators for the CRT portion of the achievement test (grades 3-8) and the writing assessment (grades 5 and 8). The identified skills are formally assessed through the CRT; however, all skills are informally assessed in the classroom.
 - For the purpose of data reporting, assessed (A) skills are grouped into categories indicating related skills and knowledge. For example, grammar, mechanics, and usage are grouped together under the grammar (G) category. Each state assessed indicator included on the Blueprint carries a legend showing that it is assessed and indicating the category in which it will be reported (e.g., Assessed/Grammar=A/G).
- Mastered and Maintained (M) indicates a skill that has been introduced, developed, and assessed. Even though a skill may be formally assessed, the development and expansion of the skill still continues.

= Introduced D = Developing A = State Assessed M = Mastered

REPORTING CATEGORY

C = Content G = Grammar MG = Meaning T = Techniques and Skills V = Vocabulary
WO=Writing Organization WP = Writing Process

NOTE: "A" Indicates the state curriculum (CRT or Writing) assessment only.
All the skills ("I" ... "D" ... "A" ... "M") are addressed in classroom assessment.

MATHEMATICS Kindergarten

NUMBER AND OPERATION

The student will identify, represent, order, and compare numbers and compute and solve problems.

Key	Reporting Category	
I/D		Count how many objects are in a set (1-20).
I		Count to 50 by 1's and 10's.
I		Count backward from 10 to 1.
I		Match quantities up to 20 with numerals.
I/D		Identify equivalent sets of objects by one-to-one correspondence.
I		Identify and write numerals 0-20.
I		Represent quantities up to 20 on ten - frames.
I		Determine if a figure has been divided into halves.
I/D		Identify and name coins (penny, nickel, dime, quarter, and half dollar) and their values.
I		Order numbers less than 20.
I		Express the relationship between two numbers less than 20 using the words less than, more than, or equal to.
I		Identify the position of a whole number less than 20 on a number line.
I		Use the language of ordinal numbers up to tenth.
I		Use concrete objects to develop strategies for addition and subtraction of whole numbers.
I		Solve simple word problems involving whole numbers 0-10.
I		Use words, actions, pictures, or concrete objects to solve problems.
I		Use pictures or objects to show one more or one less than any number to 20.
I		Explain if the solution to a word problem is reasonable.

ALGEBRA

The student will sort and classify objects; create, extend, and describe patterns; and represent number sentences with words, objects, and pictures.

I/D		Sort objects by color, size, shape, and kind.
I		Use mathematical terms appropriately.
I		Identify patterns in the environment, in arrangements of objects, or in pictures.
I		Recognize and extend a concrete, visual, or auditory two- or three-part repeating pattern.
I		Create and describe a simple repeating pattern of numbers or figures.
I		Use concrete objects or pictures to demonstrate addition and subtraction number sentences involving numbers 0 to 5.
I		Read and explain simple addition and subtraction number sentences.

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GEOMETRY

The student will identify, describe, and create basic shapes and describe relative positions and directions.

I		Match terms with given shapes (circles, squares, triangles, and rectangles) when shown in various positions.
I		Recognize circles, squares, triangles, and rectangles in the environment and as faces of three-dimensional objects.
I		Recognize basic properties of and similarities and differences between simple geometric figures (e.g., number of sides, corners).
I		Reproduce and create circles, squares, rectangles, and triangles.
I		Reproduce and create structures using three-dimensional shapes.
I		Combine two-dimensional shapes to make pictures.
I		Recognize and show terms of relative position and direction in a variety of situations (e.g., over, under, forward, backward, between, right, and left).

MEASUREMENT

The student will apply measurement concepts of time, length, weight, capacity, and temperature.

I		Demonstrate understanding of the concept of length.
I		Recognize and show which is larger/smaller, longer/shorter, taller/shorter, heavier/lighter or which holds more/holds less, when given two similar objects.
I/D		Use words to describe time (e.g., day, night, morning, afternoon, yesterday, today, and tomorrow).
I/D		Use words to describe temperature (e.g., hot, warm, cool, and cold).
I		Measure and estimate length of an object using a variety of nonstandard units.
I		Distinguish between light and heavy objects.
I		Recognize clocks and watches as instruments for measuring time and tell time to the hour.
I		Recognize a thermometer as a device to measure temperature.
I/D		Recognize a calendar as a way of measuring time.

DATA ANALYSIS AND PROBABILITY

The student will make simple graphs using concrete objects and pictures and describe events as likely or unlikely.

I		Represent and compare data using concrete objects, pictures, and simple graphs.
I		Describe events related to students' experiences as likely or unlikely.

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